

blood and spinal fluid Wassermann, negative. Urine shows trace of indican only.

The condition rapidly grew worse and on May 2 the patient was removed to the hospital, but as no improvement was noted the friends took the patient to her home on May 26, where she died on May 27. It was not possible to secure permission for an autopsy.

The most notable feature in the examination of these patients was the finding of immense numbers of the torula in the cerebrospinal fluid by direct microscopic examination and the securing of a pure culture of the characteristic organisms on artificial media.

It seems from an examination of the reports of the seven previously reported cases that in none of these were successful cultures secured from the fluid obtained by spinal puncture, although in one case organisms having the characteristic morphology were seen.

Attention should be called to the danger of failing to recognize the presence of these organisms in the direct microscopic examination of specimens of spinal fluid on account of their superficial resemblance in size and shape to lymphocytes.

The recognition within a comparatively short period of these two cases with characteristic symptoms and having the specific organism in the cerebrospinal fluid, as well as the fact that the organism may easily be overlooked, would lead one to suspect that this type of meningeal infection may be of fairly frequent occurrence and be escaping discovery.

CONCLUSIONS

The torula infection on account of its peculiar localization in the meninges and its characteristic symptomatology may justly be looked upon as a clinical entity and a specific infectious disease.

It is important in cases with intracranial and meningeal symptoms of unknown nature to carefully examine the cerebrospinal fluid by direct microscopic examination and by cultural methods.

BIBLIOGRAPHY

1. Stoddard, James L. and Cutler, Elliott C.; Torula in Man. Monograph of the Rockefeller Institute for Medical Research No. 6, January 31, 1916.
2. Rusk, G. Y.; Systemic Oidomycosis, University of California Publications in Pathology, 1912, II, 47.
3. Frothingham, L.; A Tumor-like Lesion in the Lung of a Horse Caused by a Blastomyces (Torula), Journal Medical Research, 1902, VIII, 31.
4. Pierson, Philip H.; Torula in Man. Journal A. M. A., LXIX, 2179 (December 29, 1917).

Relapsing Fever in California—LeRoy H. Briggs, San Francisco (Journal A. M. A., September 16, 1922), reports the cases of a man and his wife who, while camping in California, were probably bitten by some suctorial insect, presumably a bedbug or a tick, although this cannot be proved. In each case, eight days later, a paroxysm of chills, fever, malaise and prostration ensued and lasted three days. In the case of the husband, three relapses occurred, each more severe than the preceding. With the wife, two relapses occurred, also of increasing severity. During the four observed paroxysms, spirchetes were found in the peripheral blood in increasing numbers. Intravenous injection of 0.45 gm. of neo-arsphenamin promptly terminated the infection in both instances.

THE RELATION OF THE SURGEON TO THE ANESTHETIST *

By SAXTON POPE, M. D., San Francisco

As a matter of fact, anesthesia was forced upon surgery by a rank outsider, and so it seems to be ever since.

Preoccupied with the problems of visceral pathology and the means to remedy them, the surgeon's mind has worked more with the faculty of contrivance than the comfort and safety of his patients.

In the very essence of things, it is more important to him that he should achieve his objective than that the patient should be made comfortable during the journey. Ordinarily he is not interested in the subjective reactions of the client, only the clinical.

Through custom, the surgeon has come to accept the necessity of anesthesia, partially because it assists him in his work. But you can see even today the viewpoint of the average operator to whom anesthesia is a necessary nuisance. He stews and frets until his patient is ready for the knife, while the subservient assistant struggles with the powers of darkness and holds the trusting subject in a state of vital suspension between heaven and earth.

The anesthetist having achieved this miracle of physiologic juggling, the surgeon then bullies him for the slightest variation of balance.

During the progress of the operative readjustment, a hundred acts of surgical vandalism may be committed, each with its special, painful, shocking result, and yet the patient must not wince, nor flutter from the normal.

The opportunities for trauma are infinite in variety. From the first cold dash of alcohol and ether on the skin, through an endless series of destructive insults, to the final freight handling change from the operating table to the stretcher, the patient must be protected by a veneer of analgesia—and the anesthetist is responsible.

Consider some of the other adventures of this somnolent victim:

Lying on his back in a position well calculated to throw his sacro-iliac joints out of commission, his arms strapped to his sides, his neck in a posture inviting cervical fracture, the assistant surgeon leaning heavily on his chest or hanging on to an elevated leg, unconsciously attempting to dislocate the hip joint, he winds up by being a fit subject for a chiropractor.

The surgeon is late as usual, deliberates and makes up his mind what he wants to do; shall he do his latest operation and add another successful case to his series, or shall he take the proffered opportunity to discover what really is the matter with the patient and have to worry about the means to correct it.

If he is an intrepid surgeon, he then rushes at his task. Let us not critically down them all for these little slips in technique that require so much time to repair—accidents will happen in the best of families, and let us not broadcast it that such things are possible in modern science; but you

* Presented to Section on Anesthesiology of the Medical Society of California, May 16, 1922, at Yosemite National Park.

know, and I know—in spite of the fact that I am an alleged surgeon—what one might call an imminent surgeon. We shall not advertise our mistakes, but confess them only to our charitable equals, knowing that no matter how bad we may be, our critics undoubtedly are very much worse.

The great thing is that we are here dealing with human life instead of pancakes—and not even the best cook can make 100 per cent successful hits on a pancake. There is no surgeon without his faults and his faux pas. The best thing we can ask of our man is that, when he has us on the table, exposed to public view, that he will treat us like a friend, and not like an enemy or a cadaver.

And there lies the soul of the matter, let him remember that he is dealing with the most wonderful phenomena of the universe—life itself. In his hands are placed the fragile beauty of existence. One false move on his part and it disappears forever. How is it that this remarkable adventure is possible? The arbiter of this state of surgical privilege is the anesthetist. Without the volatile cup of Lethe, surgical operations would be unutterable crime.

Pardoning our blunders and humbly confessing our dependence upon the agent of oblivion, let us see what are our mutual relations and obligations.

In the first place, the anesthetist is entitled to that courtesy offered a consultant. She or he is an equal—in that these two must share the responsibility of conducting the patient safely through an episode of questionable outcome.

One must handle the mechanical problems of surgical procedure, the other must gauge the factors of safety, induce an unnatural and more or less dangerous period of suspense, and meeting every possible emergency of physiologic discord, conduct the human organism back to conscious activity. It is no small or elementary task. It requires that the anesthetist shall know intimately the most subtle functions of the brain, a knowledge of the gross reactions of respiration, cardiovascular phenomena and the surgical complications incident to the occasion, are but the bare essentials of his requirements. He must be wise in the psychology of the pre-operative stage, keen in his intuition of personal idiosyncrasies, and abnormal response. He must gauge the temperament of his patient. Incidentally, he must be able to check up the internist on the functions of the heart, vital capacity, renal elimination, blood dyscrasias, cerebral lesions, and a multitude of other factors having an important bearing upon the problem of narcosis.

It is essential that the anesthetist know the approximate nature of the surgical operation proposed. He must also know the severity of it, the time factor and, incidentally, the character of the surgical chief and his type of work. The anesthetist must choose the anesthetic, because he is responsible for the outcome of this feature of the problem. No stereotype narcosis exists which is suitable to all somatic conditions and varieties of surgical maneuver.

During the progress of anesthesia, the anesthetist, like an engineer in a great steamship, must

watch a score of indicators and, through a fundamental knowledge of physiologic phenomena, be able to interpret the slightest deviation from the stage of safety. No routinist, no tyro, no cocksure, innocent and blissfully ignorant neophyte should conduct this department of intelligence.

Each phase of a surgical operation differs in the necessary depth of anesthesia, and as the periods drag out, the saturation of the patient increases, his resiliency departs, where fatigue of the operator, the anesthetist and the patient all must be counted on, then the anesthetist must use rare good judgment in the conduct of the situation. As the operator undertakes each special manipulation, the anesthetist must anticipate it with an appropriate counter move—whether it be deeper narcosis, more air, rebreathing or increased intra-thoracic pressure.

It is the duty of the surgeon to forewarn the anesthetist of any departure from the routine, of any delay or prolongation of the seance.

And he must stay within the bounds of surgical anesthesia.

There is a zone of legitimate activity in surgical work; there are areas and systems that may not be invaded, and there are narrow outer boundaries of anesthesia over which the operator shall not trespass. Over this domain the anesthetist must stand guard, and, as the evidences of trauma are registered on the sensitive indicators of his conning tower, he must sound the note of warning and protest.

Here the dictatorship of the surgeon ceases, and the authority of the man who guides the destinies of cerebral and vascular control must supersede. Again they are consultants, and equals. There can be no dominance of master over assistant.

But in the absence of these untoward episodes in the progress of a surgical operation, when all runs smoothly and safe as it usually does, there is no question of leadership but perfect co-operation and peace, marked by the utmost courtesy and mutual regard. This insures the patient against the dangers of an irritable surgeon and a perturbed anesthetist.

And what excuse have I for these trite phrases; what apology for telling you what you already know? It is this that, as you patiently sit through the dreary hours of serving and saving while other men display their egotism and claim the glories, I want you to know that there are surgeons who recognize your value and your independence, that when we stop to think, we acknowledge your part is as important as ours, and in the mind of the patient often overshadows it.

On behalf of surgeons, I want to pay homage to our co-partners in service to humanity.

(Butler Building.)

California Association of Medical Social Workers

—This association has outlined a course of intensive study and round table conferences upon the following subjects: (1) Housing and Immigration Law, (2) Children's Aid Law, (3) Industrial Accident Insurance, (4) Study of Case Work. The study group meeting will be held in the assembly hall of the Children's Hospital Nurses' Home, San Francisco.—Edna Shirpser, Secretary-Treasurer.